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EXAMINER

AUGUSTINE, NICHOLAS

ART UNIT

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2179

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/733,735	Applicant(s) GHERCIOIU ET AL.	
	Examiner NICHOLAS AUGUSTINE	Art Unit 2179	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 January 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4,6 and 8-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4,6 and 8-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

- A. This action is in response to the following communications: Amendment filed: 01/27/2009. This action is made **Final**.
- B. Claims 1, 4, 6 and 8-30 remain pending.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 4, 6 and 8-30 are rejected under 35 U.S.C. 102(e) as being anticipated by Gelvin et al. (US Pat. 7,020,701 B1), herein referred to as “Gelvin”.

As for independent claims 1 and 28, Gelvin teaches a computer-implemented method and corresponding computer-accessible memory medium for programming an embedded sensor device, the method comprising, creating a graphical program (col.10,

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line 55; user interface developed for the system and ran on a computing device such as a PDA), wherein the graphical program specifies a function to be performed by the embedded sensor device (col.10, lines 53-55), wherein the graphical program comprises a plurality of interconnected nodes or icons which visually indicate the functionality of the program(col.10, lines 43-67; local users 830 may interact , if authenticated, with the network via the nodes 802 themselves through a local display and user interfaces), and wherein the embedded sensor device comprises one or more sensors (col.10, lines50-52), and wherein the embedded sensor device does not include a display (figure 42; col.20, lines 35-37; col.38, lines 3-5); storing the graphical program on a personal digital assistant (PDA) (col.11, line 35); and transmitting the graphical program from the PDA to the embedded sensor device over a serial link (col.10, line 49); wherein after said transmitting, the embedded sensor device is operable to execute the graphical program to perform the specified function (col.10, line 27 – col. 11, line 46; wherein Gelvin directly describes a system having embedded sensors in the physical worlds (in machinery, devices, etc...) wherein a user of the system is able to use a PDA to access a graphical user interface that was created for the system to interact with the "tagged" objects in the physical world (objects are tangible item having a sensor place on or embedded within) from here the user with the PDA is able to read, send, manipulate, input information remotely to the objects having sensor associated with).

As for dependent claim 4, Gelvin teaches the method of claim 1, wherein the embedded

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sensor device comprises a compact embedded sensor device between approximately 3cm x 3cm and approximately 6cm x 6cm (figure 42 and col.59, lines 16-17).

As for dependent claim 6, Gelvin teaches the method of claim 1, wherein said creating the graphical program is performed on the PDA (col.10, line 49).

As for dependent claim 8, Gelvin teaches the method of claim 1, wherein the serial link comprises a serial cable (col.10, line 49; col.19, lines 7 and 14).

As for dependent claim 9, Gelvin teaches the method of claim 1, wherein the serial link comprises a wireless serial link (col.19, line 14).

As for dependent claim 10, Gelvin teaches the method of claim 9, wherein the wireless serial link comprises an infrared serial link (col.18, line 44).

As for dependent claim 11, Gelvin teaches the method of claim 10, wherein the infrared serial link comprises a short-range infrared serial link (col.18, lines 44-45).

As for dependent claim 12, Gelvin teaches the method of claim 9, wherein the wireless serial link comprises a short-range wireless serial link or an 802.11 serial link (col.10,

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lines 25-26).

As for dependent claim 13, Gelvin teaches the method of claim 1, further comprising, analyzing the graphical program for function dependencies to generate required modules; analyzing the graphical program to determine an execution sequence; and generating a flatfile based on the required modules and execution sequence, wherein the flatfile contains the functionality of the graphical program (col.17, lines 32-53).

As for dependent claim 14, Gelvin teaches the method of claim 13, wherein said transmitting the graphical program from the PDA to the embedded sensor device over a serial link comprises, transmitting the flatfile to the embedded sensor device over the serial link (col.18, lines 1-18).

As for dependent claim 15, Gelvin teaches the method of claim 14, further comprising, the embedded sensor device processing the flatfile to generate an executable, wherein, in the embedded sensor device being operable to execute the graphical program to perform the specified function, the embedded sensor device is operable to execute the executable to perform the specified function (col.12, lines 8-38).

As for dependent claim 16, Gelvin teaches the method of claim 1, further comprising, the embedded sensor device executing the graphical program to perform the function

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(col.12, lines 8-22).

As for dependent claim 17, Gelvin teaches the method of claim 16, wherein the embedded sensor device executing the graphical program generates data, the method further comprising, the embedded sensor device sending the data to the PDA; and the PDA displaying the data (col.10, line 27 – col. 11, line 46; col.12, lines 8-22).

As for dependent claim 18, Gelvin teaches the method of claim 17, wherein the embedded sensor device sending the data to the PDA; and the PDA displaying the data are performed using a Front Panel Protocol (col.10, line 27 – col. 11, line 46; col.12, lines 8-22).

As for dependent claim 19, Gelvin teaches the method of claim 17, wherein said sending the data to the PDA comprises sending the data to the PDA over a serial cable (col.10, line 49; col.19, lines 7 and 14).

As for dependent claim 20, Gelvin teaches the method of claim 17, wherein sending the data to the PDA comprises sending the data to the PDA over a wireless serial link (col.18, line 44).

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As for dependent claim 21, Gelvin teaches the method of claim 20, wherein the wireless serial link comprises an infrared serial link (col.18, lines 44-45).

As for dependent claim 22, Gelvin teaches the method of claim 20, wherein the infrared serial link comprises a short-range infrared serial link (col.18, lines 44-45).

As for dependent claim 23, Gelvin teaches the method of claim 20, wherein the wireless serial link comprises a short-range wireless serial link or an 802.11 serial link (col.10, lines 25-26).

As for dependent claim 24, Gelvin teaches the method of claim 16, wherein the embedded sensor device executing the graphical program generates data, the method further comprising, executing a different graphical program on the PDA, wherein said executing the different graphical program comprises, performing a discovery operation to detect and establish communications with the embedded sensor device; retrieving the data from the embedded sensor device via a wireless serial transmission medium; and displaying the data on the PDA.

As for dependent claim 25, Gelvin teaches the method of claim 24, wherein the wireless serial transmission medium comprises an infrared serial link (col.18, lines 44-45).

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As for dependent claim 26, Gelvin teaches the method of claim 25, wherein the infrared serial link comprises a short-range infrared serial link (col.18, lines 44-45).

As for dependent claim 27, Gelvin teaches the method of claim 25, wherein the wireless serial link comprises a short-range wireless serial link or an 802.11 serial link (col.10, lines 25-26).

As for independent claim 29, Gelvin teaches a system for programming an embedded sensor device, the system comprising, a personal digital assistant (PDA) (col.10, line 49), comprising, a processor; a memory medium coupled to the processor, wherein the memory medium stores the program and a plurality of components of a program execution system, wherein the memory medium also stores program instructions executable to analyze the program to determine a subset of the plurality of components required for execution of the program (col.19, lines 3-16); and a display coupled to the processor and memory medium; and an embedded sensor device coupled to the computer system via a serial transmission medium (col.10, lines 25-26; col.18, lines 44-45), wherein the embedded sensor device comprises, a processor; a memory medium coupled to the processor, wherein the memory medium stores a minimal execution system; and one or more sensors, coupled to the processor and memory medium, wherein the embedded sensor device does not include a display (figure 42; col.20, lines 35-37; col.38, lines 3-5); wherein the memory medium of the PDA further stores program instructions which are executable by the processor of the PDA to,

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transmit the program and the subset of the plurality of components to the embedded sensor device over the serial transmission medium; wherein the minimal execution system is executable by the processor of the embedded sensor device to execute the program using the subset of the plurality of components; and wherein the PDA is operable to receive data from the embedded sensor device and display the data on the display (col.10, line 27 – col. 11, line 46; wherein Gelvin directly describes a system having embedded sensors in the physical worlds (in machinery, devices, etc...) wherein a user of the system is able to use a PDA to access a graphical user interface that was created for the system to interact with the "tagged" objects in the physical world (objects are tangible item having a sensor place on or embedded within) from here the user with the PDA is able to read, send, manipulate, input information remotely to the objects having sensor associated with).

As for independent claim 30, Gelvin teaches a hand-held computer (col.10, line 49), comprising: a processor; a memory medium coupled to the processor, wherein the memory medium stores a graphical program (col.19, lines 3-16), wherein the graphical program specifies a function to be performed by a sensor interface device, and wherein the graphical program comprises a plurality of interconnected nodes or icons which visually indicate the functionality of the graphical program (col.10, line 27-67); and a display coupled to the processor and memory medium (col.10, line 49; col.19, lines 3-16); wherein the memory medium further stores program instructions which are executable by the processor to: analyze the graphical program (col.10, line 27-67);

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convert the graphical program into a format suitable for transmission over a serial link to the sensor interface device (col.17, lines 32-53); and transmit the converted graphical program from the hand-held computer to the sensor interface device over the serial link (col.10, lines 25-26; col.18, lines 44-45); wherein after said transmitting, the sensor interface device is operable to execute the converted graphical program to perform the specified function (col.10, line 27-67); and wherein the memory medium further stores program instructions which are executable by the processor to: receive data from sensor interface device during execution of the converted graphical program; and display the received data on the display (col.10, line 27 – col. 11, line 46; wherein Gelvin directly describes a system having embedded sensors in the physical worlds (in machinery, devices, etc...) wherein a user of the system is able to use a PDA to access a graphical user interface that was created for the system to interact with the "tagged" objects in the physical world (objects are tangible item having a sensor place on or embedded within) from here the user with the PDA is able to read, send, manipulate, input information remotely to the objects having sensor associated with).

(Note :) It is noted that any citation to specific, pages, columns, lines, or figures in the prior art references and any interpretation of the references should not be considered to be limiting in any way. A reference is relevant for all it contains and may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art. In re Heck, 699 F.2d 1331, 1332-33, 216 USPQ 1038, 1039 (Fed. Cir. 1983) (quoting In re Lemelson, 397 F.2d 1006, 1009, 158 USPQ 275, 277 (CCPA 1968)).

Response to Arguments

Applicant's arguments with respect to claims 1, 4, 6 and 8-30 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Inquires

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nicholas Augustine whose telephone number is 571-270-1056 and fax is 571-270-2056. The examiner can normally be reached on Monday - Friday: 9:30am- 5:00pm Eastern.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Weilun Lo can be reached on 571-272-4847. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Steven B Theriault/
Primary Examiner, Art Unit 2179

/Nicholas Augustine/
Examiner
Art Unit 2179
4/30/2009